

### Amendments to the Claims:

1. **(Currently amended)** A method for manufacturing semiconductor chip ~~that chips in which~~ a semiconductor wafer, having a surface segmented by streets and formed with a plurality of circuits, is divided into individual circuit-based semiconductor chips, the method comprising:

a support substrate integration step of bonding a front surface of a semiconductor wafer to a light-transmissive support substrate through an adhesive layer having an adhesion force ~~to reduce that is reduced~~ upon ~~exposed-exposure~~ to light radiation, thereby exposing a back surface of the semiconductor wafer;

a grinding step of resting the semiconductor wafer integrated with the support substrate on a chuck table of a grinding device and grinding ~~a~~ the back surface of the semiconductor wafer;

after the grinding step, performing a tape bonding step of bonding a tape on the back surface of the semiconductor wafer while the semiconductor wafer is integrated with the support substrate ~~after the grinding step, while and~~ bonding a frame on a periphery of the tape;

after the tape bonding step, performing a re-bonding step of applying light radiation to the adhesive layer from a side of the support substrate before or after the tape bonding step to thereby reduce the adhesion force of the adhesive layer, and removing the support substrate and adhesive layer from the front surface of the semiconductor wafer after the tape bonding step to thereby support the semiconductor wafer by the tape and a the frame; and

a dicing step of resting the semiconductor wafer supported by the tape and the frame on a chuck table of a dicing apparatus and cutting along the streets ~~segmenting for a plurality of circuits into~~ to segment the semiconductor wafer into the individual semiconductor chips.

2. **(Currently amended)** A method for manufacturing semiconductor chip ~~that chips in which~~ a semiconductor wafer, having a surface segmented by streets and formed with a

plurality of circuits, is divided into individual circuit-based semiconductor chips, the method comprising:

a groove forming step of resting a semiconductor wafer on a chuck table of a dicing apparatus and forming grooves ~~on street surface segmenting for a~~ in a front surface of the semiconductor wafer to segment the plurality of circuits;

a support substrate integrating step of bonding ~~a~~ the front surface of the semiconductor wafer to a light-transmissive support substrate through an adhesive layer having an adhesion force ~~to reduce upon exposed~~ that is reduced upon exposure to light radiation, thereby exposing a back surface of the semiconductor wafer;

a grinding step of resting the semiconductor wafer integrated with the support substrate on a chuck table of a grinding apparatus and grinding the back surface of the semiconductor wafer ~~into individual semiconductor chips~~ until the grooves are ~~surfaced~~ exposed through the back surface of the semiconductor wafer to segment the semiconductor wafer into individual semiconductor chips;

after the grinding step, performing a tape bonding step of bonding a tape on the back surface of the semiconductor ~~chip in a state~~ wafer while the semiconductor wafer is integrated with the support substrate ~~of after grinding step~~ and maintaining an outer shape of the semiconductor wafer, and supporting a periphery of the tape by a frame; and

after the tape bonding step, performing a re-bonding step of applying light radiation to the adhesive layer at a side close to the support substrate ~~before or after the tape bonding step~~ to thereby reduce an adhesion force of the adhesive layer, and removing the ~~supporting support~~ substrate and adhesive layer from the front surface of the semiconductor wafer ~~after the tape bonding step thereby supporting such that~~ the semiconductor wafer is supported by the tape and the frame.

3. (Cancelled)

4. **(Currently amended)** A method according to claim 1, wherein the support substrate that is bonded to the semiconductor wafer in the support substrate integrating step is ~~carried out using the support substrate having~~ has an outer shape greater than an outer shape of the semiconductor wafer, the grinding step being carried out while measuring a thickness of the semiconductor wafer by contacting probes of a thickness measuring instrument respectively with a grinding surface of the semiconductor wafer and with a surface of the support substrate.

5. **(Currently amended)** A method according to claim 1, wherein the adhesive layer is formed by a liquid resin, the liquid resin being formed of a composition of quinone-diazido compound and resin to foam and reduce in adhesion force upon ~~exposed~~ exposure to ultraviolet radiation, wherein the liquid resin is coated on the surface of the support substrate or the semiconductor wafer.

6. **(Currently amended)** A method according to claim 2, wherein the adhesive layer is formed by a liquid resin, the liquid resin being formed of a composition of quinone-diazido compound and resin to foam and reduce in adhesion force upon ~~exposed~~ exposure to ultraviolet radiation, wherein the liquid resin is coated on the surface of the support substrate or the semiconductor wafer.

7. **(Cancelled)**

8. **(Previously presented)** A method according to claim 5, wherein the quinone-diazido compound is quinone-diazido sulphonic acid ester obtained by reacting polyhydroxy benzophenone, such as tri- or tetra-hydroxy benzophenone, with 1,2-naphtoquinone diazido-5-sulphonic acid, 1,2-naphtoquinone diazido-4-sulphonic acid, or sulphonic acid chloride thereof or the like, or at least one of sulphonic oxide compound selected from 1,2-quinone-diazido sulphonic acid or sulphonic acid chloride thereof or the like.

9. **(Original)** A method according to claim 5, wherein the resin is at least one resin selected from acryl, urethane, polyester, novolak phenol and a derivative thereof, polyvinyl phenol and a derivative thereof, and silicone and a derivative thereof, the resin being introduced with polymeric unsaturated radical.
10. **(Original)** A method according to claim 6, wherein the resin is at least one resin selected from acryl, urethane, polyester, novolak phenol and a derivative thereof, polyvinyl phenol and a derivative thereof, and silicone and a derivative thereof, the resin being introduced with polymeric unsaturated radical.
11. **(Cancelled)**
12. **(Previously presented)** A method according to claim 9, wherein the liquid resin has a viscosity of 10 - 100000 mPa • s.
13. **(Previously presented)** A method according to claim 5, wherein, in the support substrate integrating step, the liquid resin is dripped on the surface of the support substrate or the semiconductor wafer and spin-coated under rotation at 100 - 8000 rpm for 5 seconds or more, and thereafter the semiconductor wafer and the support substrate are united together through the liquid resin and baked at 50 - 150 °C for 30 seconds to 20 minutes.
14. **(Previously presented)** A method according to any of claim 1, wherein the support substrate is formed by a transparent plate of glass or plastic having a thickness of 0.5 - 2.5 mm.
15. **(Currently amended)** A method according to claim 2, wherein the support substrate that is bonded to the semiconductor wafer in the support substrate integrating step is ~~carried out using the support substrate having~~ has an outer shape greater than an outer shape of

the semiconductor wafer, the grinding step being carried out while measuring a thickness of the semiconductor wafer by contacting probes of a thickness measuring instrument respectively with a grinding surface of the semiconductor wafer and with a surface of the support substrate.

16. **(Cancelled)**

17. **(Previously presented)** A method according to claim 6, wherein the quinone-diazido compound is quinone-diazido sulphonic acid ester obtained by reacting polyhydroxy benzophenone, such as tri- or tetra-hydroxy benzophenone, with 1,2-naphtoquinone diazido-5-sulphonic acid, 1,2-naphtoquinone diazido-4- sulphonic acid, or sulphonic acid chloride thereof or the like, or at least one of sulphonic oxide compound selected from 1,2-quinone-diazido sulphonic acid or sulphonic acid chloride thereof or the like.

18. **(Cancelled)**

19. **(Previously presented)** A method according to claim 10, wherein the liquid resin has a viscosity of 10 - 100000 mPa • s.

20. **(Cancelled)**

21. **(Previously presented)** A method according to claim 6, wherein, in the support substrate integrating step, the liquid resin is dripped on the surface of the support substrate or the semiconductor wafer and spin-coated under rotation at 100 - 8000 rpm for 5 seconds or more, and thereafter the semiconductor wafer and the support substrate are united together through the liquid resin and baked at 50 - 150 °C for 30 seconds to 20 minutes.

22. **(Cancelled)**

23. **(Previously presented)** A method according to any of claim 2, wherein the support substrate is formed by a transparent plate of glass or plastic having a thickness of 0.5 - 2.5 mm.

24. **(Cancelled)**